

Name: *Key*

## Unit 10 Quiz #1

### Study Guide

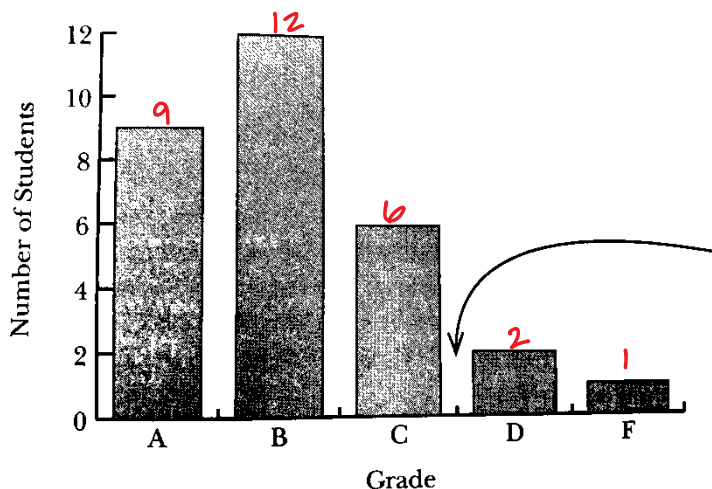


**Objective:** Determine if a variable is quantitative (numerical) or qualitative (categorical).

1. The color of Skittles. *QL*
2. The number of calories in a hamburger. *QN*
3. Whether or not a student applied to an Ivy League school. *QL*
4. Whether or not a penny lands on heads or tails. *QL*

**Objective:** Use a bar chart to answer questions about a set of data.

The bar chart represents the number of students in a class and the letter grade they earned on an assessment.



a) How many total students took the assessment?

*30*

b) What percentage of students earned a C on the assessment?

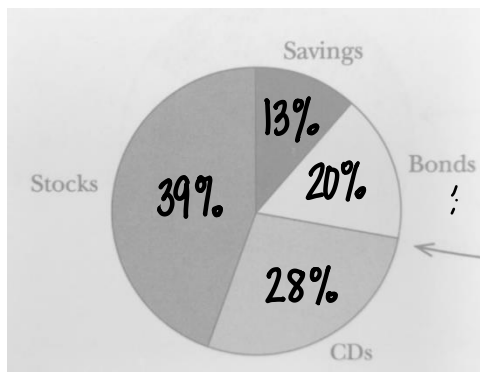
$$6/30 = 20\%$$

c) What percentage of students earned an A or a B?

$$21/30 = 70\%$$

**Objective:** Use a pie chart to answer question about a set of data.

The data represents a survey of participants and how they save their money.



a) What percentage of people use CDs and Bonds?

$$20 + 28 = 48\%$$

b) If we surveyed 500 people, how many would say they invest in Stocks?

*195*

c) If we surveyed 50 people, how many would say they use CDs?

*14*

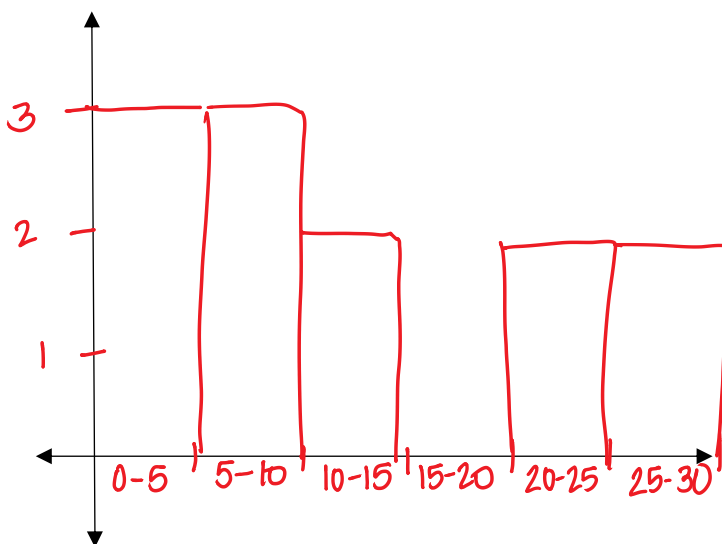
**Objective:** Given a set of data, create a histogram.

This data describes the number of text messages Algebra students receive every day.

~~29~~ ~~10~~ ~~20~~ ~~7~~ ~~0~~ ~~29~~ ~~5~~ ~~0~~ ~~0~~ ~~20~~ ~~5~~ ~~10~~

Create a frequency table.

Interval	Frequency
0-5	3
5-10	3
10-15	2
15-20	0
20-25	2
25-30	2

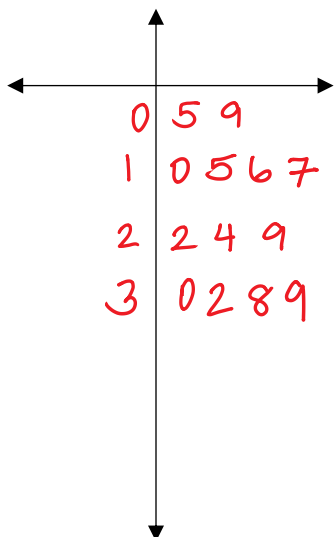


- a) How many students were surveyed? 12
- b) How many students send at most 15 text messages a day? 8
- c) What percentage of students send 25-30 text messages?  $\frac{2}{12} = 16.6\%$

**Objective:** Given a set of data, create a stem-and-leaf plot.

The data represents the average weight of a student's backpack.

~~5~~ ~~32~~ ~~10~~ ~~15~~ ~~22~~ ~~9~~ ~~24~~ 38 17 ~~29~~ ~~30~~ 39 16



- a) What is the heaviest backpack a student had? 39 lbs.
- b) What is the weight difference between the heaviest and the lightest backpack?  $39 - 5 = 34$  lbs.
- c) What percentage of students have a backpack that is less than 10 pounds?  $\frac{2}{13} = 15.4\%$